

HEALTH

Why is this important?

Research has found that health status is often related to socio-economic status and living conditions. Poor health can limit educational opportunities and employment, and lead to long term impacts.

Health indicators

- Infant death rate.
- Low birth weight babies.
- Young parenting.
- Deaths before age 65.¹

How are we doing?



The infant death rate in the Lakes DHB region decreased to 6.8 per 1,000 live births in 2011, compared to 7.5 per 1,000 live births in 2010. The infant death rate in the Lakes region was higher than the national rate (4.7 per 1,000 live births) in 2011.

The rate of low birth weight babies in the region was 60.6 per 1,000 live births and on par with the national average (59.3 per 1,000 live births) in 2011.

The rate of young parenting fell in Rotorua between 1996 and 2006 but is still above the national average.

Mortality rates for the 15-24 years age group increased in 2011 after falling in 2010.

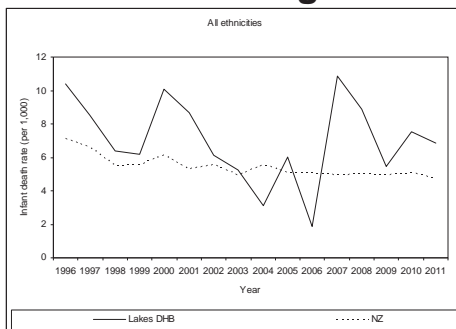
¹ In terms of deaths before age 65, this report provides age-specific deaths rates and standardised rates. Age-specific death rates calculate the number of deaths in relation to the population size of a particular age group. The numerator and denominator for this rate refer to the same age group, that is, both have the same age distribution. Standardised death rates (SDRs) provide a summary measure of the mortality experience for each area, but also allow for the different age-sex composition of each area. However, they are meaningful only in comparison with similarly computed rates. (Source: Statistics New Zealand)

Infant Death Rate

Why is this important?

An infant death is one that occurs before a child's first birthday. The infant death rate is measured as the total number of infant deaths per 1,000 live births. Infant deaths are closely related to socio-economic conditions, and access to effective health services. A low infant death rate indicates a healthy community.

How are we doing?



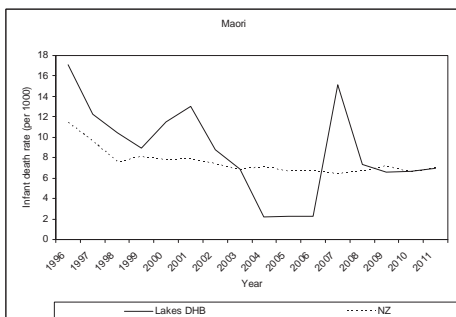
Infant death rate (all ethnicities), Lakes DHB and New Zealand, 1996-2011

Source: Statistics New Zealand

In the 1970s the infant death rate at Rotorua Hospital was consistently higher than the national rate. Since then it has come more in line with the national average, and continued to decline and fluctuate.

There were 7 infant deaths in the Rotorua District in 2011, comprising 2 neonatal and 5 post-neonatal deaths². This compares to 13 infant deaths in 2007, comprising 4 neonatal and 9 post-neonatal deaths and 12 infant deaths in 2008, comprising 7 neonatal and 5 post-neonatal deaths.³

There were 10 infant deaths in the Lakes DHB region in 2011 - 4 neonatal and 6 post-neonatal deaths.



Infant death rate (Maori), Lakes DHB and New Zealand, 1996-2011

Source: Statistics New Zealand

The infant death rate in the Lakes DHB region was 6.8 per 1,000 live births in 2011, compared to 7.5 per 1,000 live births in 2010. The infant death rate in the Lakes region was higher than the national rate (4.7 per 1,000 live births) in 2011.

Infant deaths for the region's Maori population have remained stable at 7.0 per 1,000 live births in 2011 compared to 6.7 per 1,000 live births in 2010. The infant death rate for the region's Maori population was on par with the national rate (7.0 per 1,000 live births) in 2011.

² A neonatal death is a live born infant dying in the first 28 days after birth.

A post-neonatal death is a live born infant dying after 28 completed days and before the first year of life is completed (NZIS - <http://www.nzhis.govt.nz/stats/fetal/glossary.html>).

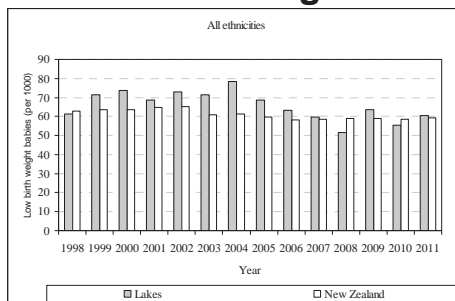
³ Because infant death numbers are very small when distributed across territorial authority, annual fluctuations can be proportionately large. Therefore infant death rates by TA are not recommended.

Low Birth Weight Babies

Why is this important?

Babies that weigh less than 2,500 grams tend to have increased risk of health problems, and a greater risk of early death. Birth weight is linked with the overall health of the mother (including nutrition and cigarette smoking) as well as the quality and accessibility of prenatal care. The higher the number of low birth weight babies per 1,000 live births, the higher the social cost of poor health and educational attainment in the future. The incidence of low birth weight babies is correlated with the infant mortality rate.

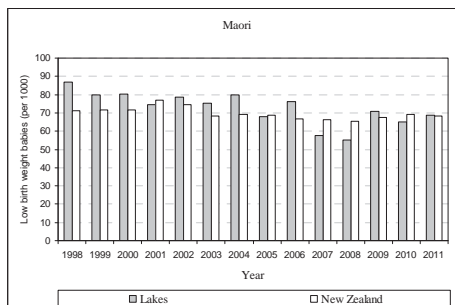
How are we doing?



Incidence of all low birth weight live births, Lakes DHB region, 1998-2011

Source: NZ Health Information Service

Before 2008 in any given year around 60 to 70 of every 1,000 live babies born in the Lakes DHB region had a low birth weight. Historically, Lakes region has generally had a higher rate of low birth weight babies than the national average, although data for 2008 and 2010 belied that trend. 2011 data showed there were 60.6 low birth weight babies per 1,000 live births in the Lakes region compared to 59.3 for New Zealand overall. Data for Lakes region shows a slightly increased level in 2011 compared with 55.5 per 1,000 live births in 2010.



Incidence of low birth weight live births (Maori), Lakes DHB region, 1998-2011

Source: NZ Health Information Service

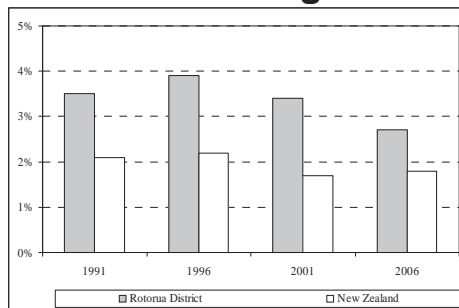
The rate of low birth weight babies born to Maori mothers in the Lakes region was almost on par with the national average in 2011, after falling in 2010. Data for 2011 showed there were 68.6 low birth weight babies per 1,000 live births in the Lakes region compared to 68.4 for New Zealand overall. However, Lakes region data shows that the 2011 level remains higher than the 2007 and 2008 levels of 57.7 and 55 low birth weight babies per 1,000 live births respectively.

Young Parenting

Why is this important?

Teenage parenthood can be a turning point that reduces young people's life opportunities in such areas as education, and employment. Young people whose schooling is shortened because of the birth of a baby generally have less education, work experience and income, and are more likely to be single parents. This has significance for their personal health, as well as the health of their children.

How are we doing?



Percentage of people aged 15-19 years who stated a parent role, Rotorua District and New Zealand, 1991-2006

Source: Statistics New Zealand/Census

Census results show that the proportion of Rotorua 15-19 year-olds who are parents increased between 1991 and 1996 but has subsequently fallen. In 2006 there were 135 (2.7%) young parents aged 15-19 years compared to 159 (3.4%) in 2001, 186 (3.9%) in 1996 and 189 (3.5%) in 1991. However, this is still higher than the national average (1.8%).

In the 20-24 years age group in Rotorua there has also been a decline in the numbers of parents to 774 (21.6%) in 2006 compared to 1,080 (22.7%) in 1991. The comparable national figure for the 20-24 years age group in 2006 was 11.1%.

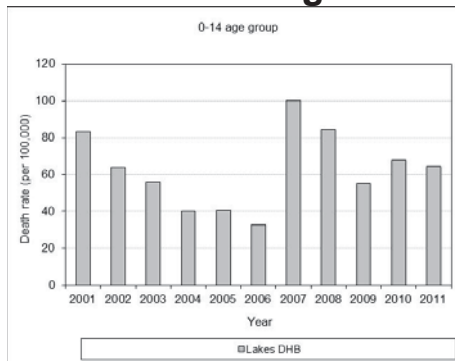
Deaths Before Age 65

Why is this important?

Life expectancy is a key indicator of overall health status. Regional differences in life expectancy may reflect differing social and economic conditions, lifestyle choices and access to health services. The Ministry of Health publishes annual data on age at death for district health boards, and sub-regions throughout New Zealand.

Although numbers and proportions of deaths for a certain group present a good snapshot of the community, when comparing different populations, especially those that might have different age structure and ethnicity composition (both factors usually influence mortality trends), it is worthwhile to look at age-specific death rates in addition to the crude numbers.

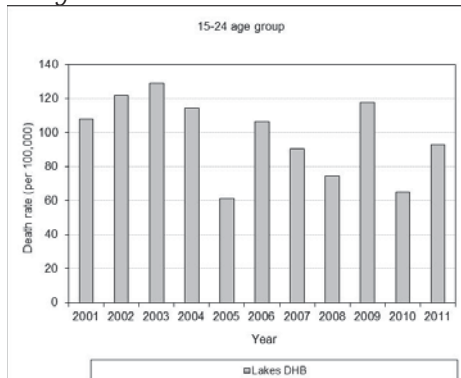
How are we doing?



Age-specific mortality rates per 100,000 for the 0-14 years age group, Lakes DHB area, 2001-2011

Source: Statistics New Zealand

Note: Deaths are based on deaths registered in NZ, of NZ residents, by date of registration.



Age-specific mortality rates per 100,000 for the 15-24 years age group, Lakes DHB area, 2001-2011

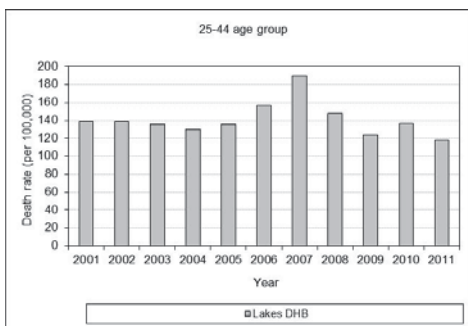
Source: Statistics New Zealand

Life expectancy in Rotorua District is gradually increasing but remains slightly below the national average. The 2005-2007 official estimates show that life expectancy at birth was 75.6 years for Rotorua males and 80.1 years for Rotorua females. The comparable national figures were 78.1 years and 82.2 years.

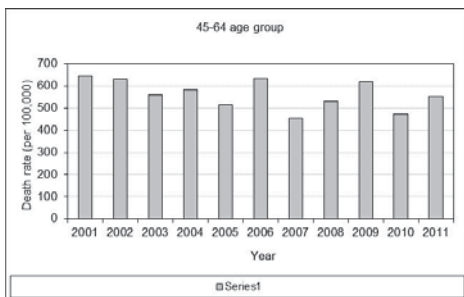
The 2005-2007 standardised death rates show that there were 6.9 deaths per 1,000 population in the Rotorua District. The comparable national figure was 5.8 deaths per 1,000 population. Standardised death rates in the Rotorua District in 1995-97 (8.7 per 1,000 population) and 2000-02 (7.8 per 1,000 population) remained consistently above the national average of 7.5 per 1,000 population and 6.5 per 1,000 population respectively.

Mortality rates of children aged 0-14 years in the Lakes DHB region have remained quite stable and were at 64.2 per 100,000 in 2011 compared to 67.9 per 100,000 in 2010. They are below the 2007 rate of 100.2 per 100,000. National rates have decreased to 45.2 per 100,000 in 2011 compared to 55.4 per 100,000 in 2007 and 50.3 per 100,000 in 2010.

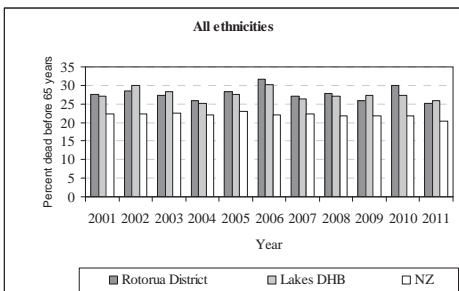
Mortality rates of the age group 15-24 years have increased during the last year in the Lakes DHB area to 92.9 per 100,000 in 2011, compared to 64.9 per 100,000 in 2010. National rates for this age group were up to 61.6 per 100,000 in 2011, compared to 56.0 per 100,000 in 2010.



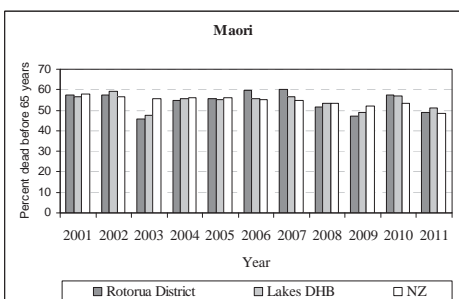
Age-specific mortality rates per 100,000 for the 25-44 years age group, Lakes DHB area, 2001-2011
 Source: Statistics New Zealand



Age-specific mortality rates per 100,000 for the 45-64 years age group, Lakes DHB area, 2001-2011
 Source: Statistics New Zealand



Percentage of deaths before age 65 years (all ethnicities), Rotorua District, Lakes DHB area and New Zealand, 2001-2011
 Source: Statistics New Zealand



Percentage of deaths before age 65 years (Maori), Rotorua District, Lakes DHB area and New Zealand, 2001-2011
 Source: Statistics New Zealand

Mortality rates of the age group 25-44 years have decreased and were down to 118.0 per 100,000 in 2011, compared to 136.7 per 100,000 in 2010. This is lower than the 2007 rate of 189.5 per 100,000. National rates were up to 92.7 per 100,000 in 2011 compared to 88.9 per 100,000 in 2010, but remained lower than the 100.8 per 100,000 in 2007.

In the 45-64 years age group mortality rates have increased during the last year in the Lakes DHB area and were up to 555.9 per 100,000 in 2011, from 474.9 per 100,000 in 2010. The 2011 rate is also higher than the 2007 figure of 454.1 per 100,000. National rates have steadily fallen over the past ten years to 397.1 per 100,000 in 2011, from 418.3 per 100,000 in 2007, and 482.7 per 100,000 in 2001.

In summary, the proportion of people in the Rotorua District who died before age 65 was 25.2% of all deaths in 2011 compared to 29.9% in 2010. A similar trend is noticeable in the Lakes DHB area and nationally, however the percentage of people who die before the age of 65 is consistently lower nationally than in either Rotorua or Lakes DHB areas, and was 20.9% in 2011.

The proportion of Maori people in the Rotorua District who died before age 65 years decreased from 57.5% of all deaths in 2010, to 48.7% in 2011. A similar trend is noticeable in the Lakes DHB area.